CORRESPONDENCE

FOOD STORED BY THE BEAN MOUSE

To the Editor of the Journal of Mammalogy:

I read with great interest the article by Mr. Vernon Bailey in the February issue of the Journal on the Identity of the Bean Mouse. In regard to a statement in the third paragraph of that article perhaps it would be well to make here a slight correction. It was stated that "They are large, fleshy beans produced on underground shoots of a trifoliate bean vine, *Falcata comosa.*"

Now as a matter of fact the large beans are not produced on underground shoots. They are produced underground on the extremities of branches which are above ground, running along the surface of the ground. These lower branches of the bean plant start out from the base of the main stem of the plant and run along the surface, making a perfect network of branches lying upon the surface of the ground under the overgrowth of the leafy branches of the plant which climb upon bushes and other vegetation. If the upper, leafy part of one of these bean plants be carefully cut away without disturbing the lower, basal branches they will appear like a lacy network of white threads upon the surface of the ground.

Falcata grows in dense masses of vines over other vegetation in some places, using such vegetation to climb up into the air and light. It has two kinds of branches, the upper, climbing branches, and the basal, prostrate branches which creep along the ground in the shade of the upper growth. These two kinds of branches on the same plant produce two kinds of flowers, from which result two forms of fruits. The upper, leafy branches bear petaliferous, insect-attracting flowers, from which result small brown bean pods from one-fourth inch to one-half inch in length. Within these pods are produced 3, 4, or 5 small mottled beans of $\frac{3}{16}$ to $\frac{5}{16}$ inch in length.

The basal branches, in conformity with their position prostrate on the surface of the ground in the shade of the upper growth are leafless and colorless. Also in conformity with their position away from possible insect visitors their flowers are not petaliferous, but cleistogamous. This self-pollinated flower produces a pod which at once pushes itself into the soft leafmold and loose soil and there develops its single large bean. This ground bean is about the size of the common lima bean, but not so flat. It is of uneven form but thicker, while not so long as the lima bean.

The fruits of both upper and basal branches are equally useful to the species for reproduction, the one being supplementary to the other, and a sort of precautionary provision in case of failure of production of either the one or the other from exigencies of weather or other conditions. Furthermore, it is a curious thing that if the fruits of the basal branches are unable to cover themselves in the soil they will develop in all manner like the fruits of the upper branches, growing small and hard and covered with a thick pod instead of the thin membranaceous covering which develops when it succeeds in burying itself in the soil. Likewise if the basal branches are exposed to the light they do not differ from the upper branches in color.

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Bismarck, North Dakota,
March 9, 1920.